PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known 09/638,192 **Application Number** August 15, 2000 Filing Date Ivan A. COWIE et al. First Named Inventor **Group Art Unit** 2631 Unassigned **Examiner Name** 

(use as many sheets as necessary) 28549/165559 of 2 **Attorney Docket Number** Sheet

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS Technology Co	nter 2			
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue				
	A18	S.V. MARIC et al., "A Class of Frequency Hop Codes With Nearly Ideal Characteristics For Use In Multiple-Access Spread- Spectrum Communications And Radar And Sonar Systems", IEEE Transactions ofn Communicatrions, Vol.40(9):1442-1447, (1992)				
	A19	E. L TITLEBAUM et al., "Time-Frequency Hop Signals Part I: Coding Based Upon The Theory Of Linear Congruences", IEEE Transactions On Aerospace And Electronic Systems", Vol. AES-17(4):490-493, (1981)				
	A20	E. L. TITLEBAUM et al., "Time-Frequency Hop Signals Part II: Coding Based Upon Quadratic Congruences", IEEE Transactions On Aerospace And Electronic Systems", Vol. AES-17(4):494-500, (1981)				
	A21	E.L. TITLEBAUM et al., "Ambiguity Properties Of Quadratic Congruential Coding", IEEE Transactions On Aerospace And Electronic Systems", Vol. 27(1): 18-29, (1991)				
	A22	R.A. SCHOLTZ, "Multiple Access With Time-Hopping Implulse Modulation", Communication Science Institute, University of Southern California, Los Angeles, CA (1993)				
	A23	A. ALBICKI et al., "Transmitter And Receiver Design For Pilot Project, Phase 1", Technical Report #1, for Rochester Gas and Electric Corporation, pp.726-742, (1988)				
	A24	BELLEGARDA et al., "Time-Frequency Hop Codes Based Upon Extended Quadratic Congrences", IEEE Transactions On Aerospace And Electronic Systems, Vol.24(6):726-742, (1988)				
	A25	BELEGARDA et al., "The Hit Array: An Analysis Formalism For Multiple Access Frequency Hop Coding", IEEE Transactions On Aerospace And Electronic Systems, Vol.27(1):30-39, (1991)				
	A26	BELLEGARDA et al., "Amendment to time-Frequency Hop Codes Based Upon Extended Quadratic Congruences", IEEE Transactions On Aerospace And Electronic Systems, Vol.27(1):167-172, (1991)				
	A27	DRUMHELLER et al., "Cross-Correlation Properties Of Algebraically Constructed Costas Arrays", IEEE Transactons On Aerospace And Electronic Systems, Vol.27:2-10, (1991)				
	A28	KOSTIC et al., "The Design Of New Opitcal Codes And Time-Hopping Patterns For Synchronous Spread-Spectrum Code Division Multiple-Access Communication Systems", IEEE, ICC, pp. 585-589, (1991)				

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (08-00)

e through 10/31/2002. OMB 0651-0031 Approved 2 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)

2

Complete if Known				
Application Number	09/638,150			
Filing Date	August 15, 2000			
First Named Inventor	James L. RICHARDS et al			
Group Art Unit	2734			
Examiner Name	Unassigned			
Attorney Docket Number	28549/165554			

				U.S. PATENT DOCUM	MENTS	
Examiner Initials *	Cite No.1	U.S. Patent Document  Kind Code <sup>2</sup> (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Releva Passages or Relevant Figures Appear
	A1	4,928,3	16	HERITAGE et al.	05/22/90	
	A2	6,160,8	02	BARRETT	12/12/00	
	A3	5,610,9	07	BARRETT.	03/11/97	RECEIVED
	A4	3,728,6	32	ROSS	04/17/73	712027722
	A5	5,377,2	25	DAVIS	12/27.94	JAN 3 0 2002
	A6	5,793,7	59	RAKIB et al.	08/11/98	JAN 3 0 2002
	A7	4,170,7	57	SKUDERA et al.	10/09/79	Toolandon Contor Of
	A8	4,641,3	17	FULLERTON	02/03/87	Technology Center 26
	A9	4,743,9	06	FULLERTON	05/10/88	
	A10	4,813,0	57	FULLERTON	3/14/89	
	A11	5,960,0	31	FULLERTON et al.	09/28/99	
	A12	5,963,5	81	FULLERTON et al	10/05/99	
-	A13	4,979,1	86	FULLERTON	12/18/90	
	A14	5,677,9	27	FULLERTON et al.	10/14/97	
	A15	5,687,1	69	FULLERTON	11/11/97	
	A16	5,832,0	35	FULLERTON	11/03/98	
	A17	5,363,1	08	FULLERTON	11/08/94	
	<del>                                     </del>					

	FOREIGN PATENT DOCUMENTS							
		For	eign Patent De	ocument	Name of Patentee	Date of Publication of	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Т <sub>6</sub>
Examiner Initials*	Cite No. <sup>1</sup>	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> ( <i>if known</i> )	or Applicant of Cited Document	Cited Document MM-DD-YYYY		
		ļ					<u> </u>	
	ļ		<u> </u>					
			<u> </u>					
		<del> </del>						
		<u> </u>						
		1						
	·	<b> </b>					-	

Examiner Signature	Date Considered	

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.